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## FCC Broadband Initiative Could Reduce Barriers to Low-Income Americans' Advancement and Promote Opportunity

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The Federal Communications Commission (FCC) is considering an important initiative to increase broadband Internet access among low-income households. The initiative would modernize the FCC's current Lifeline program, which facilitates access to basic telephone services to low-income households, including by adding broadband service to facilitate Internet access for participants. Less than half of low-income households now have high-speed Internet connections in their homes, despite mounting evidence that such connections are highly beneficial to obtaining jobs and to educational achievement, as well as to accessing health and other services and to making more economical consumer purchases.

### **Broadband Access Is Critically Important**

Internet use — especially broadband, or high-speed Internet connections, generally defined as an Internet connection other than dial-up — has in many ways become central to participation in society. High levels of adoption and expectations that job applicants, employees, students, patients, citizens, bank customers, and consumers can use the Internet have turned broadband from a luxury into a necessity. Large public and private institutions are increasingly assuming that their customers have online access, and they are adjusting their service and business models accordingly. For low-income people who lack Internet access, other obstacles, such as lack of transportation, inflexible job schedules, limited telephone minutes, or strained child care resources, can make it difficult to use alternatives for interacting with these institutions.

• Job search and work performance. Home Internet use is important in searching for and obtaining jobs. Unemployed people conducting Internet job searches between 2005 and 2008 found work about 25 percent faster than workers with comparable skill levels and other characteristics who did not search online, a study concluded.<sup>2</sup> This marked a change from an earlier study by the same authors using 1998-2001 data, which found no effect.

<sup>&</sup>lt;sup>1</sup> Thanks to Lindsey Poole, a Center intern, for her contributions to this report and to David Super for his helpful comments.

<sup>&</sup>lt;sup>2</sup> Peter Kuhn and Hani Mansour, "Is Internet Job Search Still Ineffective?" July 29, 2013, <a href="https://www.econ.ucsb.edu/~pjkuhn/Research%20Papers/NLS\_NetSearch.pdf">www.econ.ucsb.edu/~pjkuhn/Research%20Papers/NLS\_NetSearch.pdf</a>. Published in *The Economic Journal*, December 2014.

This shift in results, combined with the increasing popularity of online job search, reflects the Internet's growing importance to job searches. Some 38 percent of unemployed workers searched online for jobs in 2003, up from 14 percent in 1998, a study found. In an indication that workers increasingly perceived online search as valuable, the share of unemployed workers searching online for jobs rose both because of the increase in the share of workers with Internet access as well as because those with access became more likely to search for jobs online. A rising share of already employed workers also used online job searches, evidence that workers increasingly believe that Internet searches can provide a step up to a better job.<sup>3</sup> Other research has found that as people overcome barriers to Internet use, they conduct job searches online at higher rates than their counterparts who had Internet access all along.<sup>4</sup>

Broadband access at home and Internet skills are also important for job applications, job training,<sup>5</sup> employment scheduling,<sup>6</sup> and job performance. For example, the federal government and over 80 percent of Fortune 500 companies —including Target and Walmart,<sup>7</sup> which are large employers of low-income individuals — use online applications. In another example, almost half of all users of Comcast's targeted low-income family Internet Essentials service report that their employers expect them to have home Internet access.<sup>8</sup>

• Education. Homework increasingly demands the use of the Internet; nearly all (94 percent) school districts serving low-income populations reported that at least "some of their teachers assign Internet-based homework," and 27 percent said "more than half of their teachers do so," a 2007 study found. Most high school students need to use the Internet outside of school to complete their homework, a comprehensive new study of high school students found. Among high schoolers, 73 percent "are required to use the Internet to complete homework outside of school" daily or every few days and another 24 percent have to use the Internet for homework, but less frequently, the study found. 10

https://www.fosi.org/documents/142/Taking the Pulse Phase 1 Research Findings FINAL.pdf.

<sup>&</sup>lt;sup>3</sup> Betsey Stevenson, "The Internet and Job Search," National Bureau of Economic Research Working Paper 13886, March 2008, <a href="https://www.nber.org/papers/w13886">www.nber.org/papers/w13886</a>.

<sup>&</sup>lt;sup>4</sup> National Telecommunications and Information Administration (NTIA) & Economics and Statistics Administration (ESA), U.S. Department of Commerce, Exploring the Digital Nation: America's Emerging Online Experience, June 2013, <a href="http://www.ntia.doc.gov/files/ntia/publications/exploring">http://www.ntia.doc.gov/files/ntia/publications/exploring</a> the digital nation - <a href="mailto:americas emerging">americas emerging online experience.pdf.</a>

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> David Super, "Comment to FCC on Lifeline and Link up Reform and Modernization, Telecommunications Carriers Eligible for Universal Service Support, Connect America Fund," August 31, 2015, <a href="https://repository.library.georgetown.edu/handle/10822/761538">https://repository.library.georgetown.edu/handle/10822/761538</a>.

<sup>&</sup>lt;sup>7</sup> Federal Communications Commission, "Broadband Adoption Key to Jobs and Education," October 12, 2011, https://www.fcc.gov/document/broadband-adoption-key-jobs-and-education.

<sup>&</sup>lt;sup>8</sup> John B. Horrigan, "Essentials of Connectivity: Comcast's Internet Essentials Program and a Playbook for Expanding Broadband Adoption and Use in America," research funded by the Comcast Technology Research & Development Fund, March 2014, http://corporate.com/images/Final\_IE\_Research\_Full\_Paper.pdf.

<sup>&</sup>lt;sup>9</sup> National School Boards Association, "Creating & Connecting: Research and Guidelines on Online Social – and Educational – Networking," July 2007, <a href="http://grunwald.com/pdfs/Grunwald\_NSBA\_Study\_Kids\_Social\_Media.pdf">http://grunwald.com/pdfs/Grunwald\_NSBA\_Study\_Kids\_Social\_Media.pdf</a>.

<sup>&</sup>lt;sup>10</sup> Hispanic Heritage Foundation, myCollegeOptions, and Family Online Safety Institute, "Taking the Pulse of the High School Student Experience in America," April 29, 2015,

Yet 40 percent of households with school-age children and incomes of under \$25,000 lack a high-speed connection at home, the Pew Research Center recently found. This means that a large number of low-income children face significant obstacles to completing their homework. Or, they may have to miss extracurricular activities that enhance college admission to use broadband at a community site, such as the library. These may be particularly serious problems for the rural poor, who may be unable to stay late at school due to bus schedules and who may not have access to libraries or other public access points once they go home.

• Health care. "Broadband provides consumers the ability to research health issues, obtain and share their personal health information with third parties, and to communicate with doctors, including specialists who may work in a different city," a recent Government Accountability Office (GAO) study found. Access to high-speed Internet service also affects individuals' ability to use telemedicine, where patients can connect with health professionals remotely. It is critical that as the use of telemedicine and other health information technologies continues to grow, low-income consumers are not left behind because of economic barriers. Telemedicine and using the Internet to research health issues may also reduce health costs.

Low-income households can better navigate the health care system using the Internet. Health insurance often includes co-payments and other devices designed to reduce use of services, and low-income patients in particular forgo necessary health care disproportionately in response to such cost-sharing. Studies by RAND and others have shown that patients often do not make the best choices when curbing their use of health care in response to cost-sharing; for instance, RAND has found that they are just as likely to reduce their use of effective care as of less-effective care.<sup>15</sup> But Internet access can help patients make better-informed choices about what care to seek. It also can help patients and family members recognize early warning signs of conditions that benefit from early treatment.

• Government services. "Broadband provides an opportunity to obtain information about and apply for most government public assistance programs, such as Social Security, and to complete tasks such as tax filing," the GAO study also found. The vast majority of states (45, to be precise) have online applications for at least one of the five main state-administered programs for low-income people; for instance, one can apply online for SNAP food assistance

<sup>&</sup>lt;sup>11</sup> John B. Horrigan, "The numbers behind the broadband 'homework gap," Pew Research Center, April 20, 2015, http://www.pewresearch.org/fact-tank/2015/04/20/the-numbers-behind-the-broadband-homework-gap/

<sup>&</sup>lt;sup>12</sup> Kerry Flynn, "Living Without Broadband in 2015: How 55 Million Americans Find Jobs, Study, Watch YouTube," *International Business Times*, June 2, 2015, <a href="http://www.ibtimes.com/living-without-broadband-2015-how-55-million-americans-find-jobs-study-watch-youtube-1943615">http://www.ibtimes.com/living-without-broadband-2015-how-55-million-americans-find-jobs-study-watch-youtube-1943615</a>.

<sup>&</sup>lt;sup>13</sup> Government Accountability Office, "Broadband: Intended Outcomes and Effectiveness of Efforts to Address Adoption Barriers Are Unclear," 2015, <a href="http://www.gao.gov/assets/680/670588.pdf">http://www.gao.gov/assets/680/670588.pdf</a>.

<sup>&</sup>lt;sup>14</sup> Consumer Partnership for eHealth, "Leveraging meaningful use of Electronic Health Records to reduce health disparities," October 2013, <a href="http://nationalpartnership.org/research-library/health-care/HIT/leveraging-meaningful-use-to.pdf">http://nationalpartnership.org/research-library/health-care/HIT/leveraging-meaningful-use-to.pdf</a>.

<sup>&</sup>lt;sup>15</sup> RAND Health, "The Health Insurance Experiment: A Classic RAND Study Speaks to the Current Health Care Reform Debate," 2006, <a href="http://www.rand.org/content/dam/rand/pubs/research-briefs/2006/RAND-RB9174.pdf">http://www.rand.org/content/dam/rand/pubs/research-briefs/2006/RAND-RB9174.pdf</a> GAO, *op. cit.* 

in 42 states and for Medicaid in 37 states.<sup>17</sup> In addition to the greater difficulty that is often involved in applying in person (such as missing work) or obtaining assistance over the phone, there are other, less obvious disadvantages in not being able to apply for benefits online. Public benefit programs commonly make assistance effective based on the date of application; people who have to call to get an application mailed to them, complete it, and mail it back may have to wait longer for aid and lose a week or more of benefits.

Other government services and information are increasingly Internet-centered. Agencies are less likely to do bulk printings of consumer advisories when they can post information online. This information can range from consumer financial education to product safety information to nutritional guides. Without broadband access, low-income people may lack this information when making important decisions.

• Electronic commerce. Home broadband use facilitates online sales transactions, which allow consumers to compare prices, search for discounts, and consequently pay less for goods and services. Particularly for low-income people in smaller and rural communities, some important products they may need, such as assistive devices for people with disabilities, may not always be available in brick-and-mortar stores. Being able to obtain these items online can have a large impact on their quality of life. It also can extend the duration of time that people with disabilities can remain in their home or community.

Online sources also have consumer ratings of many businesses, allowing consumers to avoid scams and to buy from higher-quality sources.

• Civic participation. Internet access is important for informed voting and other forms of civic participation because of the diversity of information online. Federal, state, and local laws are available online, enabling low-income people who cannot afford legal assistance to better understand their rights and responsibilities.

# Low-Income Households Have Less Broadband Access Than Better-Off Households

In 2013, nearly three of every four households (73 percent) had a high-speed connection in their home, a Census Bureau report found.<sup>19</sup>

Large disparities exist, however, among households with differing levels of income, with increases in income highly associated with increases in home Internet access. For instance, the same Census Bureau report also found that almost 95 percent of households with incomes of \$150,000 or more

<sup>&</sup>lt;sup>17</sup> Center on Budget and Policy Priorities, "Online Services for Key Low-Income Benefit Programs: What States Provide Online with Respect to SNAP, TANF, Child Care Assistance, Medicaid, CHIP, and General Assistance," revised March 18, 2015, <a href="http://www.cbpp.org/research/online-services-for-key-low-income-benefit-programs">http://www.cbpp.org/research/online-services-for-key-low-income-benefit-programs</a>.

<sup>&</sup>lt;sup>18</sup> GAO, op.cit.

<sup>&</sup>lt;sup>19</sup> Thom File and Camille Ryan, "Computer and Internet Use in the United States: 2013," U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, November 2014, <a href="http://www.census.gov/history/pdf/2013computeruse.pdf">http://www.census.gov/history/pdf/2013computeruse.pdf</a>. Nearly all households with an Internet connection have a broadband connection; while 74 percent of households had an Internet subscription of any kind in 2013, only the slightly lower share of 73 percent had a broadband connection.

had a high-speed Internet connection but only 47 percent of households with incomes below \$25,000 did.

Low-income households face several barriers to broadband access, with the monthly subscription cost being a significant one.<sup>20</sup> Nearly three in ten respondents (29 percent) to a 2012 government survey reported that the expense of Internet service was the main reason they did not have it at home.<sup>21</sup>

A small share of low-income households lack access to a broadband Internet connection at home but have high-speed access through their smart phones. Some 13 percent of U.S. adults with incomes below \$30,000 fall into this category (characterized as "smart phone-dependent"), according to a recent Pew Research Center analysis. The Pew report also finds, however, that about half of smart phone-dependent users report having to cancel or suspend their service due to financial constraints. Further, while having smart phone access is surely beneficial relative to having no access at all, mobile devices are not easy to use for many Internet tasks, such as writing a resume and applying for a job. <sup>23</sup>

There is presumably an interactive effect between the lack of broadband access and the lack of digital literacy. Adults and children who lack Internet access, sometimes because of its cost, are likely to have fewer opportunities to practice using the Internet and thereby to develop digital literacy. In the same vein, individuals who take digital literacy classes but lack opportunities to put it to use will presumably not improve their capabilities much.

### The FCC Initiative

On July 17, 2015, the FCC issued a proposed rule "to rebuild the current framework of the Lifeline program and continue its efforts to modernize the Lifeline program so that all consumers can utilize advanced networks."<sup>24</sup> It is currently seeking comments, due September 30, on this rule. Among the questions it is asking are whether the current Lifeline program should be amended to include broadband as a supported service and what minimum broadband service provisions might be established.

<sup>&</sup>lt;sup>20</sup> The 2015 GAO study found the three key barriers to broadband access to be affordability, perceived relevance (which may reflect an underappreciation of its importance), and a lack of computer skills. GAO, *op. cit.* 

<sup>&</sup>lt;sup>21</sup> National Telecommunications and Information Administration, U.S. Department of Commerce, *Exploring the Digital Nation: Embracing the Mobile Internet*, October 2014, <a href="http://www.ntia.doc.gov/files/ntia/publications/exploring">http://www.ntia.doc.gov/files/ntia/publications/exploring</a> the digital nation embracing the mobile internet 10162 014.pdf.

<sup>&</sup>lt;sup>22</sup> Aaron Smith, "U.S. Smartphone Use in 2015," Pew Research Center, April 1, 2015, http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/.

<sup>&</sup>lt;sup>23</sup> Other alternatives to home broadband use, such as dial-up and community broadband use, also have limitations. Dial-up connections do not have the capacity to deliver the media-rich content common on the web today in an efficient manner, and community locations for accessing a broadband Internet connection, such as a library, often have time limits. GAO, *op. cit.* and Flynn, *op. cit.* 

<sup>&</sup>lt;sup>24</sup> http://www.gpo.gov/fdsys/pkg/FR-2015-07-17/pdf/2015-17289.pdf.

### More Universal Access Is Needed

Individuals and households need Internet access to fully participate in modern society. Home broadband use is important for employment, education, health, access to government services, day-to-day purchases, and civic participation.

The "digital divide" means that the wide-ranging and frequently irreplaceable benefits of Internet use are not available to all members of society, particularly people with low incomes. This exacerbates the effects of income inequality. Efforts to close this divide — such as the FCC's proposed initiative — are both necessary and welcome.